

Application No.: 09/817631

Docket No.: SMQ-028

REMARKS

Claims 1-29 are pending in the application of which claims 1, 11, 15, 19, 23, 28 and 29 are independent.

Claim Rejections pursuant to 35 U.S.C. § 112

Claims 19, 23-25 were rejected pursuant to 35 U.S.C. § 112 for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The antecedent basis issue noted by the Examiner in claim 19 has been addressed through an amendment. Applicant also amended the preamble of claim 23 (upon which claims 24 and 25 depend) and believes it to now be in order for allowance.

Claim Rejections pursuant to 35 U.S.C. § 102(e)

Claims 11-12, 23, 26 and 28-29 were rejected by the Examiner as being anticipated by Spies et al (United States Patent No.: 6, 055, 314, hereafter "Spies"). For the reasons set forth below, Applicant respectfully traverses the rejections.

Spies discusses a system and method for the secure purchase and delivery of video content programs. Spies discusses the use of a smart card in conjunction with a viewer computing unit to display decrypted content to a user. The smart card includes decryption functionality which is used to decrypt the video content together with the viewer computing unit.

The claimed invention addresses issues raised by previous methods of delivering digital media content over networks, such as the Internet. The present invention enables multiple types of electronic devices to access the same digital media content for the same end user through the use of a smart card equipped with a license for the digital media content. Depending on the format of the digital media content, devices such as phones, pagers, Internet appliances or PDAs can be used to present the digital media content to a user, as can traditional consumer electronic devices such as DVD players and VCRs. The encrypted content may be freely transferred and stored without copyright concerns since the decryption key is generated by the smart card

Application No.: 09/817631

Docket No.: SMQ-028

containing the license. Since the smart card contains a license for digital content, the smart card acts as a physical token that can be physically transferred or sold. The illustrative claimed invention further provides additional presentation possibilities for certain types of digital media content over what would be available to an end user using traditional physical media storage. Specifically, the present invention allows the smart card to bookmark or set a reference point, at the point where a user stops accessing a stream of digital media content. The user is able to continue viewing the stream of digital media content from the point of the bookmark when the user subsequently accesses the stream of digital media content.

Applicants have amended independent claims 1, 11, 15, 19, 23 to clarify that the smart card contains a software license for the digital content that is being decrypted and displayed to a user. Spies does not disclose a software license for the digital content being stored on the smart card. While Spies does describe the smart card holding policy descriptions applicable to the decryption process, the reference does not disclose a software license per se. The term "software license" has a very specific legal meaning relating to the use rights of specific individuals to the digital content. One of the main benefits of Applicant's invention is stated at page 2, lines 14-17 of the present Application: "[T]he encrypted content may be freely transferred and stored without copyright concerns since the decryption key is generated by the smart card containing the license. The smart card acts as a physical token that can be physically transferred or sold". This contrasts with the Spies reference where the decryption properties do not rise to the level of a license.

Claims 11 and 23 were amended to specifically include the software license limitation discussed above as a specific claim limitation rather than being indirectly referenced through the preamble. Claims 12 and 26 are dependent upon claims 11 and 23 respectively and so also include the limitation. Independent claims 28 and 29 both included a software license limitation indicating that the smart card included a software license. Accordingly, since Spies fails to disclose all of the claimed limitations, Applicant respectfully requests the withdrawal of the rejections directed towards claims 11-12, 23, 26 and 28-29 and their allowance.

Application No.: 09/817631

Docket No.: SMQ-028

Claim Rejections pursuant to 35 U.S.C. § 103(a)

Claims 1-4 and 9 were rejected by the Examiner as being unpatentable over Wiedemer (United States Patent No.: 4, 908, 834, hereafter "Wiedemer") in view of Spies. For the reasons set forth below, Applicant respectfully traverses the rejections.

Wiedemer discusses a high security pay system. The system of Wiedemer includes a scrambled broadcast receiver, a television tuner, and a removable EEPROM module with decryption functionality. The system discusses a changeable method of decryption in which the swapping of EEPROM modules (and the decryption functionality) is synchronized with the varying of the encryption code used in the broadcast signal.

The combination of Wiedemer in view of Spies fails to teach or suggest all of the Applicant's claims 1-4 and 9. As noted above, independent claim 1 was amended to include the software license limitation discussed above. Claims 2-4 and 9 are dependent upon claim 1 and thus also include the limitation. As previously noted, Spies fails to disclose a software license for the digital content stored on the smart card. Wiedemer also fails to teach or suggest this limitation. Accordingly all of the rejected claims 1-4 and 9 should be allowable. Applicants also respectfully suggest that Wiedemer fails to disclose some of the other elements of cited by the Examiner and that the motivation to combine the reference with Spies is lacking.

The Examiner cited Wiedemer as teaching the claim 1 element of "extracting a cipher from said digital media content, said cipher being combined with a second cipher produced by said electronic device and sending the combined cipher to said smart card" at fig. 3, steps 60-62. Applicants respectfully disagree.

Steps 60-62 in Wiedemer discuss identifying an external code address and presenting the latch code and address to EEPROM. The system in Wiedemer uses a broadcast code embedded in the broadcast content, a receiver code specific to the receiver, and an external code specific to the removable EEPROM in order to decrypt the broadcast content. The internal code is

Application No.: 09/817631

Docket No.: SMQ-028

combined with the retrieved external code at the receiver and the result stored (the latch code is necessary to access the EEPROM-held external code). A portion of the broadcast code is then used together with the combined code to generate a system code. The system code is then used to transform the internal code, and the result of that transformation is used with the system code to generate a numerical sequence for decryption(see entirety of Figure 3 and col. 5- col. 8 inclusive). Wiedemer does not teach or suggest the combining of a first and second cipher and the sending of the combined cipher to a smart card in order to retrieve a decryption key for the combined cipher as required by Applicants claims. Applicant notes at the outset that there is no indication that the internal code on the receiver is encrypted and would therefore suggest that the "code" is not a "cipher" as required by Applicant's claims ("cipher" denotes encryption). Additionally, the combination of the internal code with the external code does not take place until after the external code is retrieved (see steps 64 and 70). The combined result is then used on the receiver in order to determine a key for the content. In contrast in the claimed invention, a combined cipher is presented to the smart card in order to retrieve a decryption key for the digital content. The location of the decryption key generation is important because a focus of the claimed application is to remove the decryption key generation from the device receiving the content for security and portability reasons. Wiedemer in addition to failing to teach or suggest the claim limitations also fails to reach these objectives.

Applicant also notes a failure of motivation for the combination of references cited by the Examiner. As noted, Wiedemer performs its decryption operations at the receiver by extracting a code from a removable module. In contrast the system of Spies is focused on performing at least part of the decryption on the IC card(Integrated Circuit e.g. smart card, PCMCIA card). The combination is not obvious and is not suggested by the primary reference Wiedemer. Accordingly, Applicant respectfully requests the allowance of claims 1-4 and 9.

Claims 5-6 were rejected by the Examiner as being unpatentable over Wiedemer in view of Spies in further view of "Description of Digital Audio-Visual Functionalities", Digital Audio-Video Council (hereafter "DAV") . For the reasons set forth below, Applicant respectfully traverses the rejections.

Application No.: 09/817631

Docket No.: SMQ-028

Claims 5 and 6 relate to the use of the smart card to provide a "bookmark" at the point in the digital content stream where a user ceases viewing the content. DAV discusses session management where a centralized system providing content for a user's viewing keeps track of the point at which a user is interrupted. Applicant notes at the outset that claims 5 and 6 both include the limitations of claim 1 and should therefore be allowable as DAV does not include the limitations missing from claim 1 that were discussed above. Applicant further respectfully disagrees with the Examiner's contention that the combination is an obvious one. DAV discusses bookmarks in the context of session management to which the claimed invention and the other references are not directed. The bookmark is also stored at a central location rather than on a portable smart card. The combination simply is not an obvious one. Accordingly, Applicant respectfully requests the allowance of claims 5 and 6.

Claims 7-8 and 10 were rejected by the Examiner as being unpatentable over Wiedemer in view of Spies in further view of Handelman (United States Patent No.: 6, 298, 441, hereafter "Handelman"). For the reasons set forth below, Applicant respectfully traverses the rejections.

Claims 7 and 8 and 10 are dependent upon claim 1 and include the additional limitation that the digital content is audio, video or text. Handelman discusses the delivery of digital media content that may be audio, video or text. However, since Handelman does not include the limitations missing from claim 1 that were discussed above, the combination of references fails to disclose all of the claim limitations of claims 7-8 and 10 and Applicant accordingly requests their allowance.

Claims 13-14 were rejected by the Examiner as being unpatentable over Spies in view of DAV. For the reasons set forth below, Applicant respectfully traverses the rejections.

Claims 13 and 14 are dependent upon claim 11 and include the additional limitation that the reference points where a user or users stop viewing a stream of digital content are stored on the smart card (the bookmark process discussed above). DAV does not include the limitations missing from claim 11 that were discussed above, and furthermore does not teach or suggest the bookmarking process of Applicant's invention since the session management reference of DAV is not an obvious combination with Spies. The arguments relating to the underlying claim 11

Application No.: 09/817631

Docket No.: SMQ-028

discussed above are also applicable. Accordingly, Applicant requests the allowance of claim 13-14.

Claims 15-16 were rejected by the Examiner as being unpatentable over Tsuria et al (United States Patent No.: 6, 499, 103, hereafter "Tsuria") in view of Chaney (United States Patent No.: 6, 035, 037, hereafter "Chaney") in further view of Spies. For the reasons set forth below, Applicant respectfully traverses the rejections.

Independent claim 15, and claim 16 which is dependent thereon, claim the use of multiple smart cards in the decryption process. The cipher extracted from the digital media content is sent to a second smart card which is used to generate a new cipher which is sent to the first smart card. The first smart card generates a first decryption key based upon the new cipher and sends it to the electronic device. The electronic device uses the first decryption key and a second decryption key generated by the second smart card together with a decryption algorithm to decrypt the digital media on the electronic device.

Tsuria discusses a symbol display system. A composite signal is transmitted to multiple subscriber units. The composite signal includes an encoded broadcast signal which is encoded in accordance with multiple control words and multiple encryption control messages. The system is used to display a symbol on a display. Chaney discusses a system for processing a video signal via a series of connected high speed signal processing smart cards. The cards are used to deliver processed images that include multiple image portions such as picture-in-picture and picture-outside-picture. However, Tsuria does not teach or suggest the transmitting of a cipher to a smart card and the generation of a new cipher by the smart card based on that original cipher which then forms the basis for an encryption key generated by a second smart card. Similarly, the Chaney reference discusses signal processing but does not discuss the encryption of data resulting from the use of the chained smart cards. There is no motivation within Tsuria that suggests its obvious combination with Chaney. The cited combination of references thus fails to disclose all of the elements of Applicant's independent claim 15. Accordingly, Applicant requests the allowance of claims 15 and 16.

Application No.: 09/817631

Docket No.: SMQ-028

Claims 17-18 were rejected by the Examiner as being unpatentable over Tsuria in view of Chaney in further view of Spies, in view of DAV. Claims 17-18 are dependent upon claim 15 and it is respectfully suggested that they are allowable for the reasons set forth above. Applicant also reincorporates the previous arguments submitted for claims 5-6 and 13-14 with regards to the DAV reference as an additional reason for allowability.

Claims 19-20 were rejected by the Examiner as being unpatentable over Tsuria in view of Spies. Independent claim 19 was amended as set forth above to include the limitation of a software license for the digital content included on the smart card. Both Tsuria and Spies fail to teach or suggest this element. Accordingly, Applicant requests the allowance of claims 19-20.

Claims 21-22 were rejected by the Examiner as being unpatentable over Tsuria in view of Spies in further view of DAV. Claims 21-22 are dependent upon claim 19 and it is respectfully suggested that they are allowable for the reasons set forth above. Applicant also reincorporates the previous arguments submitted for claims 5-6, 13-14 and 17-18 with regards to the DAV reference as an additional reason for allowability.

Claims 24-25 and 27 were rejected by the Examiner as being unpatentable over Spies in view of Handelman. Claims 24-25 and 27 are dependent upon claim 23 and it is respectfully suggested that they are allowable for the reasons set forth above discussing claim 23.

Application No.: 09/817631

Docket No.: SMQ-028

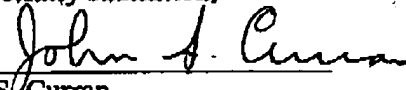
CONCLUSION

In view of the above Amendment and remarks, applicant believes the pending application is in condition for immediate allowance.

Applicant believes no fee is due with this statement. However, if a fee is due, please charge our Deposit Account No. 12-0080, under Order No. SMQ-028 from which the undersigned is authorized to draw.

Dated: December 22, 2004

Respectfully submitted,

By 

John S. Curran
Registration No.: 50,445
LAHIVE & COCKFIELD, LLP
28 State Street
Boston, Massachusetts 02109
(617) 227-7400
(617) 742-4214 (Fax)
Attorney/Agent For Applicant